To the Commission:

I have read the proposal at length. In its overall thrust, I agree with it and urge its implementation. With respect to specific aspects, and particularly the issue of amateur satellite operators conducting orbital debris assessments, I think more work needs to be done before implementation regulations.

Orbital debris mitigation is not a novel concept for commercial and governmental space operators. However, to superimpose commercial or governmental standards on amateur satellite operators would be a onerous burden. My particular ideas in this regard reach two aspects of orbital debris mitigation...

[1] Amateur satellite operators should consider the overall life-expectency of their proposed satellite, together with orbital decay data, and give the Commission an anticipated useful life of the proposed space station. That said, the Commission needs to be open to revision of these assumptions. AMSAT-OSCAR 7 has proven that an old satellite in the amateur radio service can spring back to life with amazing results.

[2] The Commission may wish to consider having amateur radio operators include flight termination systems (FTS) in their space stations. FTS will allow for the safe destruction of an on-orbit satellite before it disintegrates and becomes a hazard to space navigation. Any FTS should be capable only of being armed from the ground, should be capable of near-complete anhilation of the space station, and should be employed when the satellite has obviously exceeded its useful life-expectency. Alternatively, satellites can be equipped with de-orbiting thrusters. I see this latter option as a somewhat more expensive and, therefore, less utilitarian means of debris avoidance because it exposes the amateur space station operator to untold liabilities under the Outer Space Treaty ("Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies"). Properly using FTS to terminate space station operations can reduce a satellite to tiny particles, too small to damage operational satellites and manned spacecraft. De-orbiting a satellite presupposes the possibility that a portion of the spacecraft will survive reentry and impact the ground or airborne objects. The latter event would be fatal to the amateur space station service, both in terms of publicity and in terms of liability.

While I concede being no expert on spacecraft or satellites, it seems that a modest debris mitigation program might enhance the image of the space stations amateur radio operators deploy, provided that it isn't too costly. Whatever the final conclusion is, I trust the Commission will agree that the amateur radio service will continue to be a service which works hardest to be good neighbors to all.

Respectfully submitted:

/s./ James E. Whedbee, M.Ed.
James Edwin Whedbee, N0ECN
4415 NE 55th Street
Kansas City, MO 64119-2848